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HOUSE BILL 1958

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State of Washington                      60th Legislature                      2007 Regular Session

By Representatives Williams, Moeller, Chandler and Condotta

Read first time 02/02/2007. Referred to Committee on Commerce & Labor.

1            AN ACT Relating to performing engineering services on significant  
2 structures; and amending RCW 18.43.040 and 18.43.020.

3 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

4            **Sec. 1.** RCW 18.43.040 and 2000 c 172 s 1 are each amended to read  
5 as follows:

6            (1) The following will be considered as minimum evidence  
7 satisfactory to the board that the applicant is qualified for  
8 registration as a professional engineer, engineer-in-training,  
9 professional land surveyor, or land-surveyor-in-training, respectively:

10            (a)(i) As a professional engineer: A specific record of eight  
11 years or more of experience in engineering work of a character  
12 satisfactory to the board and indicating that the applicant is  
13 competent to practice engineering; and successfully passing a written  
14 or oral examination, or both, in engineering as prescribed by the  
15 board.

16            (ii) Graduation in an approved engineering curriculum of four years  
17 or more from a school or college approved by the board as of  
18 satisfactory standing shall be considered equivalent to four years of  
19 such required experience. The satisfactory completion of each year of

1 such an approved engineering course without graduation shall be  
2 considered as equivalent to a year of such required experience.  
3 Graduation in a curriculum other than engineering from a school or  
4 college approved by the board shall be considered as equivalent to two  
5 years of such required experience(~~(:—PROVIDED, That)~~). However, no  
6 applicant shall receive credit for more than four years of experience  
7 because of undergraduate educational qualifications. The board may, at  
8 its discretion, give credit as experience not in excess of one year,  
9 for satisfactory postgraduate study in engineering.

10 (iii) Structural engineering is recognized as a specialized branch  
11 of professional engineering. To receive a certificate of registration  
12 in structural engineering, an applicant must hold a current  
13 registration in this state in engineering and have at least two years  
14 of structural engineering experience, of a character satisfactory to  
15 the board, in addition to the eight years' experience required for  
16 registration as a professional engineer. An applicant for registration  
17 as a structural engineer must also pass an additional examination as  
18 prescribed by the board. Applicants for a certificate of registration  
19 in structural engineering who have had their application approved by  
20 the board prior to July 1, 2001, are not required to have an additional  
21 two years of structural engineering experience if the applicant passes  
22 the additional structural examination before January 30, 2002.

23 (iv) An engineer must be registered as a structural engineer in  
24 order to provide structural engineering services for significant  
25 structures. The board may waive the requirements of this subsection  
26 (1)(a)(iv) until December 31, 2009, if:

27 (A) On January 1, 2007, the engineer is registered with the board  
28 as a professional engineer; and

29 (B) Within two years of January 1, 2007, the engineer demonstrates  
30 to the satisfaction of the board that the engineer has sufficient  
31 experience in the duties typically provided by a professional  
32 structural engineer regarding significant structures.

33 (b)(i) As an engineer-in-training: An applicant for registration  
34 as a professional engineer shall take the prescribed examination in two  
35 stages. The first stage of the examination may be taken upon  
36 submission of his or her application for registration as an engineer-  
37 in-training and payment of the application fee prescribed in RCW  
38 18.43.050 at any time after the applicant has completed four years of

1 the required engineering experience, as defined in this section, or has  
2 achieved senior standing in a school or college approved by the board.  
3 The first stage of the examination shall test the applicant's knowledge  
4 of appropriate fundamentals of engineering subjects, including  
5 mathematics and the basic sciences.

6 (ii) At any time after the completion of the required eight years  
7 of engineering experience, as defined in this section, the applicant  
8 may take the second stage of the examination upon submission of an  
9 application for registration and payment of the application fee  
10 prescribed in RCW 18.43.050. This stage of the examination shall test  
11 the applicant's ability, upon the basis of his or her greater  
12 experience, to apply his or her knowledge and experience in the field  
13 of his or her specific training and qualifications.

14 (c)(i) As a professional land surveyor: A specific record of eight  
15 years or more of experience in land surveying work of a character  
16 satisfactory to the board and indicating that the applicant is  
17 competent to practice land surveying, and successfully passing a  
18 written or oral examination, or both, in surveying as prescribed by the  
19 board.

20 (ii) Graduation from a school or college approved by the board as  
21 of satisfactory standing, including the completion of an approved  
22 course in surveying, shall be considered equivalent to four years of  
23 the required experience. Postgraduate college courses approved by the  
24 board shall be considered for up to one additional year of the required  
25 experience.

26 (d)(i) As a land-surveyor-in-training: An applicant for  
27 registration as a professional land surveyor shall take the prescribed  
28 examination in two stages. The first stage of the examination may be  
29 taken upon submission of his or her application for registration as a  
30 land-surveyor-in-training and payment of the application fee prescribed  
31 in RCW 18.43.050 at any time after the applicant has completed four  
32 years of the required land surveying experience, as defined in this  
33 section, or has achieved senior standing in a school or college  
34 approved by the board. The first stage of the examination shall test  
35 the applicant's knowledge of appropriate fundamentals of land surveying  
36 subjects, including mathematics and the basic sciences.

37 (ii) At any time after the completion of the required eight years  
38 of land surveying experience, as defined in this section, the applicant

1 may take the second stage of the examination upon submission of an  
2 application for registration and payment of the application fee  
3 prescribed in RCW 18.43.050. This stage of the examination shall test  
4 the applicant's ability, upon the basis of greater experience, to apply  
5 knowledge and experience in the field of land surveying.

6 (iii) The first stage shall be successfully completed before the  
7 second stage may be attempted. Applicants who have been approved by  
8 the board to take the examination based on the requirement for six  
9 years of experience under this section before July 1, 1996, are  
10 eligible to sit for the examination.

11 (2) No person shall be eligible for registration as a professional  
12 engineer, engineer-in-training, professional land surveyor, or land-  
13 surveyor-in-training, who is not of good character and reputation.

14 (3) Teaching, of a character satisfactory to the board shall be  
15 considered as experience not in excess of two years for the appropriate  
16 profession.

17 (4) The mere execution, as a contractor, of work designed by a  
18 professional engineer, or the supervision of the construction of such  
19 work as a foreman or superintendent shall not be deemed to be practice  
20 of engineering.

21 (5) Any person having the necessary qualifications prescribed in  
22 this chapter to entitle him or her to registration shall be eligible  
23 for such registration although the person may not be practicing his or  
24 her profession at the time of making his or her application.

25 **Sec. 2.** RCW 18.43.020 and 1995 c 356 s 1 are each amended to read  
26 as follows:

27 The definitions in this section apply throughout this chapter  
28 unless the context clearly requires otherwise.

29 (1) (~~Engineer: The term~~) "Engineer" (~~as used in this chapter~~  
30 ~~shall~~) means a professional engineer as (~~hereinafter~~) defined in  
31 this section.

32 (2) (~~Professional engineer: The term~~) "Professional engineer"  
33 (~~within the meaning and intent of this chapter, shall~~) means a person  
34 who, by reason of his or her special knowledge of the mathematical and  
35 physical sciences and the principles and methods of engineering  
36 analysis and design, acquired by professional education and practical

1 experience, is qualified to practice engineering as (~~hereinafter~~)  
2 defined in this section, as attested by his or her legal registration  
3 as a professional engineer.

4 (3) (~~Engineer-in-training: The term~~) "Engineer-in-training" (~~as~~  
5 ~~used in this chapter~~) means a candidate who (~~has~~): (a) Has  
6 satisfied the experience requirements in RCW 18.43.040 for  
7 registration; (b) has successfully passed the examination in the  
8 fundamental engineering subjects; and (c) is enrolled by the board as  
9 an engineer-in-training.

10 (4) (~~Engineering: The term~~) "Engineering" (~~as used in this~~  
11 ~~chapter shall~~) means the "practice of engineering" as (~~hereinafter~~)  
12 defined in this section.

13 (5) (~~Practice of engineering: The term~~) (a) "Practice of  
14 engineering" (~~within the meaning and intent of this chapter shall~~)  
15 means any professional service or creative work requiring engineering  
16 education, training, and experience and the application of special  
17 knowledge of the mathematical, physical, and engineering sciences to  
18 such professional services or creative work as consultation,  
19 investigation, evaluation, planning, design, and supervision of  
20 construction for the purpose of assuring compliance with specifications  
21 and design, in connection with any public or private utilities,  
22 structures, buildings, machines, equipment, processes, works, or  
23 projects.

24 (b) A person shall be construed to practice or offer to practice  
25 engineering, within the meaning and intent of this chapter, who  
26 practices any branch of the profession of engineering; or who, by  
27 verbal claim, sign, advertisement, letterhead, card, or in any other  
28 way represents himself or herself to be a professional engineer, or  
29 through the use of some other title implies that he or she is a  
30 professional engineer; or who holds himself or herself out as able to  
31 perform, or who does perform, any engineering service or work or any  
32 other professional service designated by the practitioner or recognized  
33 by educational authorities as engineering.

34 (c) The practice of engineering (~~shall~~) does not include the work  
35 ordinarily performed by persons who operate or maintain machinery or  
36 equipment.

37 (6) (~~Land surveyor: The term~~) "Land surveyor" (~~as used in this~~  
38 ~~chapter shall~~) means a professional land surveyor.

1           (7) (~~Professional land surveyor: The term~~) "Professional land  
2 surveyor" (~~as used in this chapter~~) means a person who, by reason of  
3 his or her special knowledge of the mathematical and physical sciences  
4 and principles and practices of land surveying, which is acquired by  
5 professional education and practical experience, is qualified to  
6 practice land surveying and as attested to by his or her legal  
7 registration as a professional land surveyor.

8           (8) (~~Land surveyor in training: The term~~) "Land-surveyor-in-  
9 training" (~~as used in this chapter~~) means a candidate who: (a) Has  
10 satisfied the experience requirements in RCW 18.43.040 for  
11 registration; (b) successfully passes the examination in the  
12 fundamental land surveying subjects; and (c) is enrolled by the board  
13 as a land-surveyor-in-training.

14           (9) (~~Practice of land surveying: The term~~) "Practice of land  
15 surveying" (~~within the meaning and intent of this chapter, shall~~)  
16 means assuming responsible charge of the surveying of land for the  
17 establishment of corners, lines, boundaries, and monuments, the laying  
18 out and subdivision of land, the defining and locating of corners,  
19 lines, boundaries, and monuments of land after they have been  
20 established, the survey of land areas for the purpose of determining  
21 the topography thereof, the making of topographical delineations and  
22 the preparing of maps and accurate records thereof, when the proper  
23 performance of such services requires technical knowledge and skill.

24           (10) (~~Board: The term~~) "Board" (~~as used in this chapter shall~~)  
25 means the state board of registration for professional engineers and  
26 land surveyors, provided for by this chapter.

27           (11) "Significant structures" include:

28           (a) Hazardous facilities, defined as: Structures housing,  
29 supporting, or containing sufficient quantities of explosive substances  
30 to be of danger to the safety of the public if released;

31           (b) Essential facilities that have a ground area of more than five  
32 thousand square feet and are more than twenty feet in mean roof height  
33 above average ground level. Essential facilities are defined as:

34           (i) Hospitals and other medical facilities having surgery and  
35 emergency treatment areas;

36           (ii) Fire and police stations;

37           (iii) Tanks or other structures containing, housing, or supporting

1 water or fire suppression material or equipment required for the  
2 protection of essential or hazardous facilities or special occupancy  
3 structures;  
4 (iv) Emergency vehicle shelters and garages;  
5 (v) Structures and equipment in emergency preparedness centers;  
6 (vi) Standby power-generating equipment for essential facilities;  
7 (vii) Structures and equipment in government communication centers  
8 and other facilities requiring emergency response;  
9 (viii) Aviation control towers, air traffic control centers, and  
10 emergency aircraft hangars; and  
11 (ix) Buildings and other structures having critical national  
12 defense functions;  
13 (c) Structures exceeding one hundred feet in height above average  
14 ground level;  
15 (d) Buildings that are customarily occupied by human beings and are  
16 five stories or more above average ground level;  
17 (e) Bridges having a total span of more than two hundred feet and  
18 piers having a surface area greater than ten thousand square feet; and  
19 (f) Buildings and other structures where more than three hundred  
20 people congregate in one area.

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